

REMARKS

This communication is submitted in response to the final Office Action mailed March 20, 2007, in which claims 1, 2 and 4-21 are pending and stand rejected for various reasons.

Claim 21 is rejected under 35 USC § 101 because the claimed invention is directed to non-statutory subject matter, i.e., there is no limitation on what a transmission apparatus can be. Claim 21 is now slightly amended merely by replacing the term “transmission apparatus” with “digital signal processor.” This is supported by the specification, for example at page 7, first paragraph. Applicant respectfully submits that this introduces no new issues, and merely focusses the claimed invention on statutory subject matter.

Claims 1, 2 and 4-21 are rejected under 35 USC § 102 as being anticipated by *Agarwal et al.* (U.S. Patent No. 6,477,669).

Agarwal relates to adaptive control of forward error correction code for data transmission (such as wireless transmission). *Agarwal* is described in relation to ATM cell transmission via wireless links.

Agarwal determines, at the receiving terminal, the byte error rate of the transmission. The receiving terminal then determines a length for the forward error correction code which will help ameliorate the byte error rate and transmits this information to the transmitting terminal. The transmitting terminal then uses this length for the forward error correction code of present and future frames (see page 7, line 62 to page 8, line 17).

Agarwal does not describe the concept of *intervals* between data segments using large amounts of control data (i.e., low compression of headers) where data segments using smaller amounts of control data (i.e., high compression of headers) are used within the interval.

The Office Action states that “if the quality of the link is high fewer bits can be allocated for data correction and inversely when the quality is low more bits from each data packet can be allocated for data correction, i.e., the interval between data correction packets decreases”. Applicants concur that *Agarwal* describes that “if the quality of the

link is high fewer bits can be allocated for data correction and inversely when the quality is low more bits from each data packet can be allocated for data correction". However, it does not follow that "the interval between data correction packets decreases".

Agarwal does not disclose determination of an interval where during each interval low control data is sent and at the end of each interval high control data is sent, as is claimed in the present invention. The present invention can be envisaged graphically as regular spikes.

Agarwal determines for a number of frames that a high amount of error code will be transmitted or will determine for a number of frames that a low amount of error code will be transmitted based on the error rate. *Agarwal* can be envisaged graphically as irregular peaks or troughs.

Agarwal is designed to address the problems of long periods of interference, such as rain (see page 7, line 47). *Agarwal* would be ineffective for sporadic interference, as it would increase the error code for all frames until the next error rate check. This would result in a loss of data bandwidth.

The present invention is effective under both scenarios. During long periods of interference, the interval would reduce to very little. For sporadic interference, the present invention would decrease the interval between low-compressed headers.

The present invention provides more consistent data bandwidth than *Agarwal*, is it does not overreact to interference.

To summarize, the present invention claims determining an interval based on the estimated quality of the data path. The interval decreases when the estimated quality of the data path decreases. The intervals determine how frequently a "low or no compression" format is used for control data instead of a "high compression" format. *Agarwal* does not disclose the interval concept, but instead increases the amount of control data for all frames.

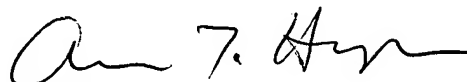
In addition, it can be seen that *Agarwal* does not disclose teaching regularly transmitting a data segment with a large amount of control data. *Agarwal* only discloses transmitting data segments with increased control data when the bit error rate is high.

In the present invention, a data segment with a large amount of control data is transmitted every interval. The advantage of transmitting a data segment with a large

amount of control data (for example, a low compressed header) regularly is to catch an undetected it error in the highly compressed header.

Therefore, the present invention is novel and inventive in light of *Agarwal*. The rejections of the official action of March 20, 2007, having been shown to be inapplicable, withdrawal thereof is requested, and passage of claims 1-2 and 4-21 to issue is earnestly solicited.

Respectfully submitted,



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